

In the Specification:

Please substitute the following paragraphs for the corresponding paragraphs beginning at the indicated location in the specification as originally filed.

Page 3, line 16+:

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Current practical limitations of data transmission rate and bandwidth have caused the adoption of interlaced raster scans for display of digitally transmitted data on cathode ray tubes and the like. This technique exploits the relatively long persistence/slow negrescence of phosphors and other devices after excitation and allows the refresh rate for the display to be reduced to somewhat below the so-called flicker fusion frequency of the human eye to allow a reduced data transmission rate (one-half the spatial resolution) while generally presenting a display of acceptable appearance. However[[.]]_L the interlaced scan in combination with low refresh rate and either or both forms of spatial and luminance quantization discussed above can form other visual artifacts to which the human eye is quite sensitive given certain image conditions.

Page 8, line 14+:

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It should be recognized that the comparison of two vertically adjacent pixel luminance values requires storage of luminance values (either original or corrected) corresponding to an entire interlaced field (one-half of all pixels displayed) as well as a substantial computational burden which must be performed in substantially real time. Such storage capacity can only be achieved with substantial hardware cost even though special purpose chips for such purposes are commercially available. ~~in~~ In digital transmission systems capable of processing digital image data, such buffering must be done prior to the

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digital encoder which is generally integrated with other processing structure (e.g. decompression processor) and access to the digital encoder is thus often very difficult and clumsy, if possible at all.

Page 22, line 5+:

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It should also be understood that while MPEG is a currently preferred industry standard, the practice of the invention does not rely on the particulars of any transmission or compression technique. That is, it is sufficient to the practice of the invention that video information in some usable format be provided from MPEG video buffer 110 to MPEG video display buffer/control 45'. Video data from the same or a similar source could be provided to one or more other image plane buffers/controls (e.g. 43⁺ for scaled video plane 3) as well. Again, it is sufficient to the practice of the invention that either memory section 110 or 120 receive displayable video or graphics from some source, more generally depicted at input 115 to memory 100, of which MPEG decoder 60 is exemplary.

Page 24, line 16+:

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The mixer/blender 140 thus outputs (preferably eight-bit) luminance values (and chrominance values, which are not affected by or operated upon by the invention) to clipping circuit 145. The action of the clipping circuit 145 is illustrated in Figure 7. A preferred form of clipping is referred to as the CCIR 601 standard which, for luminance values of 0 - 255 for an eight-bit luminance value, limits the usable/allowed values to 16 - 235, inclusive. The disallowed luminance values 0 - 15 and ~~235~~ 236 - 255 can then be detected and interpreted as signals directed to other purposes. In accordance with the invention, thirty-two of these unused/disallowed luminance values are interpreted as run length codes to allow data

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compression for storage; permitting a compression ratio
of up to 16 (e.g. a luminance byte and a run length
byte for up to 32 identical pixels).
